

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

SUBSTITUTE for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/668,850
Sheet 1 of 1		Filing Date	09/22/2003
		First Named Inventor	Zhu Yinghui
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	033946-0301

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CL	A1	4,363,747		Hawthorne et al.	12-14-1982	
	A2	5,407,884		Turner et al.	04-18-1995	
	A3	5,830,958		Peifer et al.	11-03-1998	
	A4	6,245,706		Hlatky	06-12-2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
CL	A5	WO	97/10248		Montell Technology Company B.V.	03-20-1997		
	A6	WO	99/05182		BP Chemicals Limited	02-04-1999		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
CL	A7	Crowther et al., "Group 4 metal dicarbollide chemistry, synthesis, structure and reactivity of electrophilic alkyl complexes (Cp)(C ₂ B ₉ H ₁₁)M(R) (M=Hf, Zr)." Journal American Chemical Society, 113:1455-1457, 1991.	
	A8	Kim et al., "Dicarbollide analogues of the constrained-geometry polymerization catalyst." Organometallics, 20: 4298-4300, 2001.	
	A9	Wilson et al., "Development of carborane synthons: Synthesis and chemistry of (aminoalkyl) carboranes." Inorganic Chemistry, 31: 1955-1958, 1992.	
	A10	Zhu et al., "The first half-sandwich d ⁰ -metallacarboranes stabilized by metal-nitrogen sigma bond using C _(cage) -appended anionic alkylamido moiety: a synthetic investigation." Inorganic Chemistry Communications, 4:486-489, 2001.	
	A11	Zhu et al., "Synthesis and characterization of constrained-geometry half-sandwich sila- and germacarboranes derived from a trianionic C _(cage) -appended alkyloxo-C ₂ B ₈ -carborane ligand." Inorganic Chemistry Communications, 5: 296-299, 2002.	
	A12	Russell N. Grimes, <u>Carboranes</u> , New York: Academic Press, 1970, p. 197-198, ISBN 75-127684.	

Examiner Signature	<i>[Signature]</i>	Date Considered	4-5-05
--------------------	--------------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, PO Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/668,850
		Filing Date	09/22/2003
		First Named Inventor	Zhu Yinghuai
		Group Art Unit	1713
		Examiner Name	Unknown
Sheet	1	of	2
		Attorney Docket Number	033946-0301

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
CL	A1	5483014A		Turner et al.	01-09-1996	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
CL	A2	EP	0 638 593 A1		Shell Internationale Research Maatschappij B.V.	02-15-1995		
	A3	JP	07-070222		Idemitsu Kosan Co. Ltd.	03-14-1995		
	A4	WO	01/00691		Eastman Chemical Company	01-04-2001		
	A5	WO	01/16189 A1		Eastman Chemical Company	03-08-2001		
	A6	WO	00/75204 A1		Eastman Chemical Company	21-14-2000		

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
CL	A7	Dodge et al., Titanium and zirconium Et ₂ C ₂ B ₄ H ₄ -Metal-Phosphine complexes: Synthesis, characterization, and ethylene polymerization activity." Journal of the American Chemical Society, 12:10573-10580, 2000	
	A8	Kim et al., Dicarbolide analogues of the constrained-geometry polymerization catalyst. Organometallics, 20: 4298-4300, 2001	
	A9	Wang et al., Reactions of L ₂ Zr(NMe ₂) ₂ with Me ₃ Al and PhC≡CH: synthesis and structural characterization of new zirconium carborane complexes [L ₂ =Me ₂ Si(C ₉ H ₈)(C ₂ B ₁₀ H ₁₀) and Me ₂ C(C ₅ H ₄)(C ₂ B ₁₀ H ₁₀)]. Journal of Organometallic Chemistry, 683: 39-43, 2003	

Examiner Signature	<i>Carla Lu</i>	Date Considered	4-5-05
--------------------	-----------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/668,850
(use as many sheets as necessary)		Filing Date	09/22/2003
Sheet 2 of 2		First Named Inventor	Zhu Yinghuai
		Group Art Unit	1713
		Examiner Name	Unknown
		Attorney Docket Number	033946-0301

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
CL	A10	Wang et al., Synthesis, structural characterization, and olefin polymerization behavior of Group 4 metal complexes with constrained-geometry carborane ligands. Organometallics, 20: 5110-5118, 2001	
	A11	Wang et al., Multiple insertion of unsaturated molecules into the Zr-N bonds of [n ₅ -6-Me ₂ A(C ₉ H ₆)(C ₂ B ₁₀ H ₁₀)]Zr(Nme ₂) ₂ (A=C, Si). Organometallics, 22: 4522-4531, 2003.	
	A12	Zhu et al., "The first half-sandwich d ⁰ -metallacarboranes stabilized by metal-nitrogen sigma bond using C _(cage) -appended anionic alkylamido moiety: a synthetic investigation." Inorganic Chemistry Communications, 4:486-489, 2001.	
	A13	Zhu et al., "Synthesis and characterization of constrained-geometry half-sandwich sila- and germacarboranes derived from a trianionic C _(cage) -appended alkyloxo-C ₂ B ₉ -carborane ligand." Inorganic Chemistry Communications, 5: 296-299, 2002	
	A14	Zi et al., Synthesis, structural characterization, and catalytic property of Group 4 metal carborane compounds with a ¹ Pr ₂ NB-bridged constrained-geometry ligand. Organometallics, 21: 3850-3855, 2002	
	A15	International Search Report for International Application No. PCT/SG2004/000297	

Examiner Signature	<i>Angie Lu</i>	Date Considered	4-5-05
--------------------	-----------------	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.